

DISCUSSIONS of BLOODLESS CIRCUMCISION

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BLOODLESS CIRCUMCISION of the Newborn

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By Hiram S. Yellen, M.D.

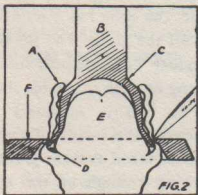
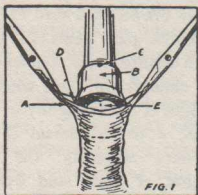
CIRCUMCISION is one of the oldest operations recorded in the history of medicine and while the method of procedure has kept pace with medical progress in general there has always been the possibility of a hemorrhage with each case. Medical literature records many fatal hemorrhages and many infections as a result of circumcision of the new born and it is known that 2% of all skin cancers are penis cancers. With this in mind we set about to develop a safe and simple apparatus for the performance of this operation with the result that we now have a clamp which not only eliminates the possibility of hemorrhage but also restricts the

minimum chance of infection without the use of sutures.

About a year ago Aaron Goldstein of this city developed a clamp such as we were looking for and since then we have used it on many cases including new born infants. This efficient instrument for circumcision is small, compact, light as strength will permit and perfected so that one man can operate without the necessity of employing an assistant. The technic is quite simple, and the time required is much less than by any other method. With the use of this clamp we never employ sutures, no bleeding is encountered and it leaves a clean cut incision which heals perfectly in 36 hours with practically no chance of infection because the mucous membrane and skin are securely clamped together.

Figure 1 and Figure 2 are diagrams showing the procedure.

The following instruments and materials are all that are really required: the clamp, 2 small haemostats, a probe with flattened end, a scissors with one blunt blade, an abcess knife, sterile vaseline, and vaseline gauze.



We proceed as follows: After properly cleansing the penis (E) and pubis, the dorsal aspect of the prepuce (A) is put on a stretch by

grasping it on either side of the median line with a pair of haemostats. A flat probe, anointed with vaseline, is then pressed between the prepuce and the glans in order to separate adherent mucous membrane from the prepuce. The prepuce is then gently drawn backward exposing the entire glans penis (E). This is again cleaned in the manner which one chooses. In cases where the prepuce is drawn tightly over the glans, a partial dorsal slit will facilitate applying the cone portion of draw stud over the glans. (Note, if too long a slit is made, the cone has a tendency to slip off the glans. The slit should, therefore, be made only sufficiently long enough to enable the cone to be easily applied.) After anointing the inside of the cone, (B) it is placed over the glans penis allowing enough of the mucous membrane to fit below the cone in order that too much of this tissue is not removed. The prepuce is then pulled thru and above the bevel

hole in the platform (F) and clamped in place. In this way the prepuce is crushed against the cone causing haemostasis over all the blood vessels. We allow this pressure to remain 5 minutes, and in older children slightly longer. The excess of the prepuce is then cut with a sharp knife without any danger of cutting the glans, which is always protected by the cone prtion of the instrument, leaving a very fine 1/32 of an inch ribbon-like membrane formed between the new union of the skin and mucous membrane. The pressure is then released. The circumcision is completed and the penis is covered with vaseline gauze.

No anesthesia is used.

On children older than 12 months, we find it is advisalbe to insert a few sutures.

At this date we have performed more than 500 circumcisions among newborn and as yet have

not encountered any infection nor hemorrhage. The appearance is as neat as a clean cut incision of any clean wound.

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F. W. FRANCHERE, M.D. of
*Lake Crystal, Minn., has
suggested placing two traction
sutures in the prepuce to pull it
thru the hole in the base plate.*

The manufacturer acknowledges the cooperation of Dr. S. Richard Sacks, Buffalo, in the development of this instrument.

Also, the modification suggested by Dr. Christopher D'Amanda of Rochester, New York, in September, 1934.

For PHYSICIANS and SURGEONS

These technics enable you to obtain a consistently perfect result in every case. Bloodless, practically painless, freedom from infection, and healing in faster time.

Can be used in office without assistance with minimum inconvenience to the patient.

No.		For Glans Dia.
500-S	Ex. Small	1.1cm (7/16")
500	Newborn	1.3cm (1/2")
501-S	Infant	1.45cm (9/16")
501	Child	1.6cm (5/8")
502	Youth	2.1cm (13/16")
503	Adult	2.6cm (1")
504	Adult	2.9cm (1 1/8")
505	Adult	3.2cm (1 1/4")
506	Adult	3.5cm (1 3/8")

OFFICE TECHNIC of Adult Circumcision

By Ernest L. Brodie

Circumcision has been an operation of great antiquity. Rathbun (1) has stressed its relation to religious rites in the earlier civilizations. Wolbarst (2) has clearly shown the increased incidence of penile cancer in the uncircumcized.

The present economic situation of many of our patients often makes hospitalization impossible. Hence, any procedure that lends itself to office practice is more than acceptable to the patient.

A simple operative technic which is readily done in the office is presented.

EQUIPMENT REQUIRED

DRUGS

- (a) Anesthetics: 2% Procaine
(with adrenalin)
- (b) Antiseptics: any of the following is suitable:
 - 1. Scott's Solution
(mercurochrome-acetone-alcohol).
 - 2. Tr. Merthiolate
 - 3. Tr. Metaphen
- (c) Ointment for dressing:
sterile vaseline

INSTRUMENTS

- (a) 5cc syringe with two No. 26
needles
- (b) Haemostats
- (c) Scissors
- (d) Knife
- (e) Probe
- (f) Adult Circumcision
Clamp (*Fig. 1*)
- (g) Thumb forceps with teeth
- (h) Needle Holder

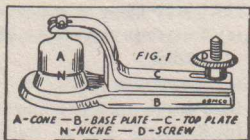
INCIDENTAL SUPPLIES

- (a) Two towels
- (b) Cotton and applicators

- (c) Sterile gauze pads
- (d) One-inch bandage
- (e) Half-inch adhesive
- (f) Sutures — two No. 00 plain catgut with atraumatic needle

The adult circumcision clamp is a modification of the infant circumcision clamp, as advocated by Yellen (3), itself a definite improvement on an instrument devised by Lewis (4).

The adult clamp (*Fig. 1*) consists of four parts, cone (a),



base plate (b), top plate (c), and screw (d).

Brodie and Szczepanski (5) have measure the size of the glans in 100 adults. From this data a series of fitting cups were made and three sizes in cones evolved, by fittings made on 400 adults

ranging in age from 15 to 60 years. A cone with a base diameter of 3.2 cm fits the majority of cases.

The action of the clamp is dependent on pressure exerted on a narrow rim of tissue which ensures adherence of outer skin and the inner preputial surface; it also prevents immediate retraction of blood vessels.

By slipping the cone over the glans and making a trial fitting the applicability of any cone can be predetermined.

If the glans is markedly smaller than the cone tried, a smaller size cone should be used.

The method of use of this device is given in detail in the operative technic which follows.

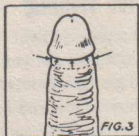
OPERATIVE TECHNIC

With the patient on the examining table, the penis (whole shaft and glans) is painted with the antiseptic solution and towels are placed transversely above and below.

The method of anesthesia is essentially that of Hertzler (6). A circular injection is made in the mid-portion of the shaft of the penis (*Fig. 2*). This is necessary in



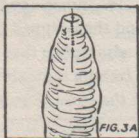
the areolar tissues, since it is almost impossible to inject it intracutaneously in this location. Usually about 2.5cc suffices. Next the foreskin is retracted and an injection is made about the corona



(*Fig. 3*) forcing the solution

toward the base of the glans. Care should be exercised here; if too much anesthetic is used there is considerable distortion of the part. Ordinarily 2.5cc are sufficient. This anesthetic ring completely encircles the glans; the frenum must be carefully infiltrated if operative pain is to be avoided.

If the foreskin is irretractable, a line of infiltration is made dorsally, exactly in the mid-line



(Fig 3A). The anesthetic should be deposited close to the preputial



surface. A dorsal slit is made (Fig 3B) just long enough to allow full

retraction (if too long a slit is made, the cone will not maintain its position satisfactorily). Bleeders, commonly encountered along the cut edge, should be ligated so that the operative field is not obscured. Following this slit, the usual coronal injection is made.

All adhesions are then freed by blunt or sharp dissection. Next, the cone is lubricated with vaseline on both its inner and outer surfaces and then slipped over the glans and adjusted so that the free end of the frenum is on a level with the rim of the cone (*Fig. 4*).



The next step is to pick up the redundant tissue exactly at the junction of the outer skin and preputial surface. This is best done with haemostats placed anteriorly,

posteriorly and laterally. The mass of tissue is then pulled over the cone (if desired, the cone may be applied after skin has been picked up). The cone is then forced down and the redundant tissue pulled up. Care must be taken to see that the frenal relationship of the cone is undisturbed. By tension on the tissue, the amount removed can be governed. While-maintaining these relationships, a short piece of No. 25 guage annealed copper wire is tied around the tissue, at the level of the niche, and tightened about it (*Fig. 4*). The excess wire is cut off and the twisted ends bent back against the penis, so that at this time the portion that will be removed may be clearly seen. Since the wire maintains the position of the cone and the tissue, the haemostats are removed and the base plate slipped over the mass. The top plate is hooked under the arms of the cone and slipped into its notch in the base plate and the screw turned down

until it is very tight. This pressure is maintained for a full five minutes (actual time). Lubricating jelly applied to the penis is of assistance should there be difficulty in slipping the base plate over the cone and redundant tissue. The base plate must be below the level of the copper wire and against the flare of the cone.

At the end of five full minutes, the redundant tissue is cut away by holding the knife parallel to the surface of the base plate (*Fig. 5*). Care must be taken that this is



removed flush with the level of the plate. The screw is then loosened and the clamp removed. The pressure has given us temporary coaptation of the cut edges and haemostatis. Neither is

permanent, hence considerable care is necessary in placing the sutures.

The first stitch is a mattress about frenum (*Fig. 6*). Next, two



interrupted sutures are placed on either side of the mattress to complete the triangle at the frenum; then a mattress suture dorsally (*Fig. 6A*). These sutures control the major bleeding points;



sufficient mattress sutures are then placed on either side of these basic sutures to maintain accurate coaptation of the cut edges.

Bleeding is looked for; if none, the antiseptic is applied to the wound and a simple vaseline dressing is put on.

To date, ten cases have been operated in the office. Seven cases required a cone with a diameter of 3.2cm, three with a diameter of 2.9cm. Assistance, before the technic is developed may be needed when the copper wire is applied; it is certainly not necessary in any of the other steps. This method of circumcision is practically bloodless, painless, and is an ideal office procedure.

POST OPERATIVE CARE

There have been no unusual complications in the cases operated. Simple daily dressings are done. The stitches are usually out about the fifth day.

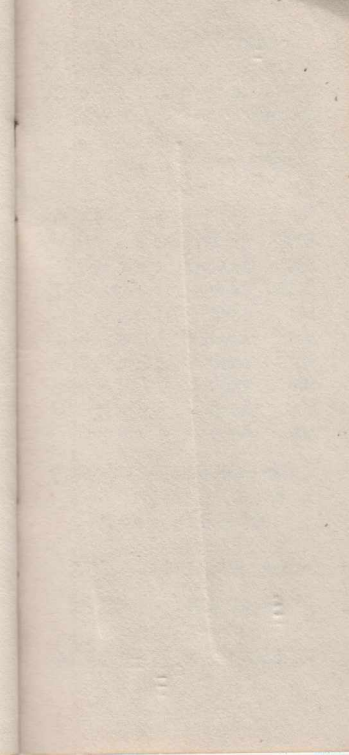
The development of this method of circumcision has been possible only by the kind cooperation of Mr. A.A. Goldstein of the Gomco Surgical Manufacturing Corporation, Buffalo, N.Y.

*(From the June 5th, 1935
issue of Medical Record)*



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